

REMARKS

As a preliminary matter, Applicants thank the Examiner for the allowance of claims 32 and 33.

Claims 1, 8, and 22 stand rejected under 35 U.S.C. 102(e) as being anticipated by Lien et al. (U.S. 6,493,050). Claims 1 and 8 have been amended, and Applicants respectfully traverse as follows.

With respect to claims 1 and 8, Applicants traverse the rejection because the cited reference does not disclose (or suggest) that the spacers cover adjacent edges of color filters. Fig. 16 of Lien clearly shows that Lien's post spacers 108, 308 are only formed in an area where two different color filters 502, 504 overlap. The overlapping filters 502, 504 are clearly shown not to have adjacent edges. In fact, the edge of the filter 502 is shown to even extend past the post spacer 108, 308 itself. Lien's configuration therefore, is different from the present invention.

In contrast, claims 1 and 8 of the present invention as amended both recite, among other things, that adjacent edges of color filters are covered with the cell gap adjusting spacers. Lien shows no such configuration. The differences between Lien and the present invention are most clearly illustrated by a comparison of Fig. 16 of Lien with Fig. 4 of the present invention. Fig. 4 of the present invention illustrates how adjacent edges of two respective adjacent color filters are covered by the spacers 25a. Fig. 16 of Lien, on the other hand, shows no such adjacent edges of color filters covered by its post spacer 108, 308. Lien specifically describes that the post spacers are formed only in a region of color filter overlap,

not in
claims

and not adjacent edges. In fact, Lien actually shows adjacent edges of color filters 504 and 512, but no post spacer covering the area. Accordingly, for at least these reasons, the Section 102 rejection of claims 1 and 8 based on Lien is respectfully traversed.

New claims 54 and 55 correspond to original claims 1 and 8 respectively, but recite new features that are different from those now recited in amended claims 1 and 8. Applicants respectfully submit that new claims 54 and 55 are also allowable over the Lien reference for reasons similar to those discussed above, namely, that Lien does not show post spacers formed in an area of one color filter. Lien clearly shows that the post spacers are formed only in an area where two color filters overlap, and therefore not one color filter only.

With respect to claim 22, Applicants respectfully traverse the rejection because Lien does not teach (or suggest) first and second spacers of differing respective heights. As discussed above, Lien shows one post spacer 108, 308 only. (See Fig. 16). The ridges 114, as identified by the Examiner as “domain defining projections,” are not taught or suggested by Lien as being spacers. Lien instead specifically teaches that the ridges 114 are equivalent to the pre-tilt structures 134, and do not function in any way as spacers. Accordingly, because Lien does not teach or suggest two different spacers of differing heights, the Section 102 rejection of claim 22 based on Lien is respectfully traversed.

Claims 13-16 stand rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi (U.S. 5,040,875). Claims 13-16 have been cancelled without prejudice, rendering this rejection now moot.

Claims 22-24 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kishimoto et al. (U.S. 6,281,960). Claim 24 has been cancelled without prejudice, rendering the rejection with respect to this claim moot. With respect to claims 22 and 23, Applicants respectfully traverse the rejection because the cited reference does not disclose (or suggest) two different spacers of two differing respective heights.

Similar to the discussion above with respect to the Lien reference, Kishimoto fails to teach or suggest two different spacers of different heights. The Examiner has identified Kishimoto's spacer 48 as equivalent to the first spacers of the present invention, and Kishimoto's polymer walls 10 as equivalent to the second spacers of the present invention. Kishimoto walls 10, however, do not (and could not) function as spacers, as the term is known in the art.

Kishimoto shows that the walls 10 have a height of only half of the distance between the two substrates 2, 40. For the walls 10 to function as spacers therefore, the pillar 12c would first have to be deformed to a height of almost zero. Deformation of the pillars 12c to such an extent would likely either destroy the pillars, or render them completely inoperable for their intended use, at the very least. Accordingly, no reasonable interpretation of the walls 10 could have the walls be "spacers," and the rejection of claim 22 based on Kishimoto is respectfully traversed for at least these reasons.

Claim 23 is dependent on independent claim 22, and therefore should be in condition for allowance for at least the reasons discussed above with respect to claim 22. New claim 56 is based upon claim 22, but recites a different combination of features.

Applicants submit that claim 56 should be also in condition for allowance for at least the reasons discussed above with respect to claim 22. New claims 57-68 all depend directly or indirectly from one of claims 22 and 56, and therefore should also be in condition for allowance, which is respectfully requested.

Claims 34-41 stand rejected under 35 U.S.C. 102(e) as being anticipated by Kim (U.S. 6,043,511). Independent claims 34 and 38 have been amended to describe first and second pixel regions of the recited pixel region, and Applicants respectfully traverse.

With respect to claim 34, claim 34 now recites, among other things, that in the first pixel region, the final protection film is interposed between the pixel electrodes and the transparent substrate. In the second pixel region, the final protection film is not interposed between the pixel electrode and the transparent substrate. Kim discloses no such features.

The Examiner has identified Kim's passivation film 61 as equivalent to the insulating final protection film of the present invention. The configuration of Kim, which includes the film 61, however, is different than the configuration of the present invention. Fig. 10 of Kim clearly does not show that the passivation film 61 is interposed between the pixel electrodes 70 and the substrate 110 in some pixel regions, but not in others. In fact, the film 61 is shown to not be interposed between the electrodes 70 and the substrate 100 at all. Accordingly, for at least these reasons, the rejection of claim 34 based on Kim is respectfully traversed.

With respect to claim 38, claim 38 as amended recites, among other things, that the thickness of the final protection film is different in between the first pixel regions and the

second pixel regions. Similar to the discussion above with respect to claim 34, Kim shows no such features as in claim 38. In fact, Kim does not show that any part of the film 61 even corresponds to any pixel regions. Accordingly, the thickness of the film between first and second pixel regions cannot be different when there is actually *no* thickness of the film in *any* pixel region, and the rejection is therefore traversed for at least these reasons.

Claims 35-37 all depend from independent claim 34, and claims 39-41 all depend from independent claim 38, and therefore include all of the features of the respective base claims, plus additional features. Applicants therefore respectfully traverse the rejection of these claims for at least the reasons discussed above with respect to the respective base claims.

Claims 47 and 48 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kishimoto in view of Miyazaki et al. (U.S. 5,815,232). Applicants respectfully traverse this rejection because neither of the cited references, whether taken alone or in combination, discloses or suggests first and second gap holding spacers, the first gap holding spacers formed on top of a column laminated in the crystal injection port, the second gap holding spacer formed in the display region, and where the height of the first gap holding spacer is greater than the second gap holding spacer.

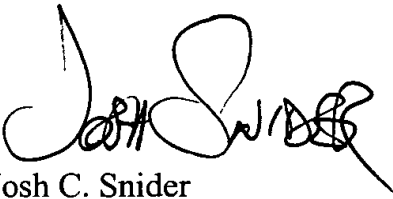
As discussed above, with respect to claims 22 and 23, Kishimoto does not disclose two different spacers of two different respective heights. Accordingly, Kishimoto could not teach or suggest the two different gap holding spacers of claim 47 of the present invention. Similarly, Miyazaki also teaches one spacer only, but at only the liquid crystal

injection port. Moreover, Miyazaki shows no second gap holding spacer in the display area, or even a spacer of a different height. Accordingly, there could be no suggestion to combine the two references when neither teaches nor suggests such a significant features of the present invention. Because claim 47 now recites the first gap holdings spacer formed on a column laminated in the liquid crystal injection port, a second gap holding spacer formed in the display region, and that the height of the first gap holding spacer from a substrate is greater than the second gap holding spacer, the Section 103 rejection of claim 47 (and its dependent claim 48) is respectfully traversed.

For all the foregoing reasons, Applicants submit that this application, including claims 1, 8, 22-23, 32-41, 47-48, and 54-69 is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned Attorney if an interview would expedite prosecution.

Respectfully submitted,

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